TO: Primary Care Practitioners, Infection Control, Labs, and ERs

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RE: Listeriosis

DATE: September 9, 2011

In the past two weeks, the Nebraska Department of Health and Human Services Office of Epidemiology has received three reports of listeriosis (two in Douglas County and one in Custer County). The age range is 46 to 85. Two are female. Of the two with known hospitalization history, both were hospitalized. PFGE (DNA fingerprinting) has completed on one isolate. It matches isolates from two other states. The investigation in this cluster so far is finding a strong association with cantaloupe.

The following groups are at increased risk:

- •Pregnant women: Pregnant women are about 20 times more likely than other healthy adults to get listeriosis. About one in six (17%) cases of listeriosis occurs during pregnancy.
- •Newborns: Newborns suffer the most serious effects of infection in pregnancy.
- •Persons with weakened immune systems from transplants or certain diseases, therapies, or medications.
- •Persons with cancer, diabetes, alcoholism, liver or kidney disease.
- •Persons with AIDS: They are almost 300 times more likely to get listeriosis than people with normal immune systems.
- •Older adults

Healthy children and adults occasionally get infected with *Listeria*, but they rarely become seriously ill.

A person with listeriosis usually has fever and muscle aches, often preceded by diarrhea or other gastrointestinal symptoms. Almost everyone who is diagnosed with listeriosis has "invasive" infection, in which the bacteria spread beyond the gastrointestinal tract. The symptoms vary with the infected person:

- Pregnant women: Pregnant women typically experience only a mild, flu-like illness. However, infections
 during pregnancy can lead to miscarriage, stillbirth, premature delivery, or life-threatening infection of the
 newborn.
- Persons other than pregnant women: Symptoms, in addition to fever and muscle aches, can include headache, stiff neck, confusion, loss of balance, and convulsions.

Listeriosis can be treated with penicillin or ampicillin alone or with aminoglycosides. For persons with penicillin allergy, TMP-SMX or erythromycin is preferred. Cephalosporins are not effective. Resistance to tetracycline has been seen previously.

Recommendations for persons at high risk, such as pregnant women and persons with weakened immune systems, in addition to the recommendations listed above, include:

•Meats:

°Do not eat hot dogs, luncheon meats, cold cuts, other deli meats (e.g., bologna), or fermented or dry sausages unless they are heated to an internal temperature of 165°F or until steaming hot just before serving.

Media Talking Points: CDC investigating reports of *Acanthamoeba* keratitis

Date of Information: March 24, 2011

•Avoid getting fluid from hot dog and lunch meat packages on other foods, utensils, and food preparation surfaces, and wash hands after handling hot dogs, luncheon meats, and deli meats.

°Do not eat refrigerated pâté or meat spreads from a deli or meat counter or from the refrigerated section of a store. Foods that do not need refrigeration, like canned or shelf-stable pâté and meat spreads, are safe to eat. Refrigerate after opening.

•Cheeses:

°Do not eat soft cheese such as feta, queso blanco, queso fresco, brie, Camembert, blue-veined, or panela (queso panela) unless it is labeled as made with pasteurized milk. Make sure the label says, "MADE WITH PASTEURIZED MILK."

•Seafood:

°Do not eat refrigerated smoked seafood, unless it is contained in a cooked dish, such as a casserole, or unless it is a canned or shelf-stable product. Refrigerated smoked seafood, such as salmon, trout, whitefish, cod, tuna, and mackerel, is most often labeled as "nova-style," "lox," "kippered," "smoked," or "jerky". These fish are typically found in the refrigerator section or sold at seafood and deli counters of grocery stores and delicatessens and would not be considered canned or shelf-stable and should be avoided by persons at high risk of *Listeria* infection.

Canned and shelf stable tuna, salmon, and other fish products are safe to eat.

If you see a patient with listeriosis, please report it to your local health department. Laboratories are asked to send in all *Listeria* isolates to NPHL for PFGE analysis.